

**LAND USE CONTROL IMPLEMENTATION PLAN****NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
KENNEDY SPACE CENTER  
BREVARD COUNTY, FLORIDA**

**FACILITY:** Jay Jay Railroad Yard  
Solid Waste Management Unit No. 68

**CONTAMINANTS:** Arsenic, PAHs, and TRPHs in Soil

**CONTROL:** Maintain Site as Railroad Yard

**PURPOSE OF LAND USE CONTROL IMPLEMENTATION PLAN**

This Land Use Control Implementation Plan (LUCIP) has been prepared to inform current and potential future users of the Jay Jay Railroad Yard (JJRY) of institutional controls that have been implemented at the site<sup>1</sup>. Although there are no current unacceptable risks to human health or the environment associated with the JJRY, institutional land use controls (LUCs) will maintain site use as a railroad yard. Controls will include periodic inspection, condition certification and agency notification.

**WHY LAND USE CONTROLS ARE NEEDED**

Human health and ecological risk assessments were completed as part of a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI). Chemicals of concern identified for human health risk during the RFI included arsenic, polynuclear aromatic hydrocarbons (PAHs), and total recoverable petroleum

hydrocarbons (TRPHs) in soils.

**SITE DESCRIPTION**

The JJRY site is a NASA-operated facility that includes a series of rail lines that span the entire length of the JJRY peninsula, and a generator building (H2-1245), located on the southeast corner of the peninsula. The generator building houses a diesel generator and a double-walled above ground fuel storage tank. Evidence of unauthorized dumping and debris burning was identified in an area located in the northeast corner of the peninsula (approximately 150 feet due north of Building H2-1245). The JJRY site is used to convey materials to and from the KSC. Based on the history of operations at the SWMU, suspected sources of contamination include the chemical and fuel storage areas, and areas in which unauthorized activities have occurred.

**SITE LOCATION**

The JJRY is located approximately 1.5 miles north of the city of Titusville, Florida (Figure 1) at the east end of Parrish Road on the

*1. This LUCIP summarizes institutional controls regarding the NASA KSC Jay Jay Railroad Yard. For detailed information on the site, consult the Jay Jay Railroad Yard administrative file, which is available for review by contacting the KSC Environmental Program Office at telephone number (321) 876-8411.*

property divided between Florida East Coast Railroad (FEC) and NASA.

The area of the JJRY covered by this LUCIP is situated within the footprint of the rail lines and 10 feet on either side of the rail lines at the site. The site is located within the N ½, SE ¼ of Section 21 and the N ½, SW ¼ of Section 22 of Township 21 South, Range 35 East, Mims, Florida Quadrangle. The soil use control area is comprised of the materials, including rock aggregate and soils, used for construction of the subbase of the railway. Coordinates of the corners of the LUCs are provided in Figure 2 in the State Plane Coordinate System NAD 1983.

## **SITE CONTAMINATION AND CONTROL**

Soil within the LUC boundary may contain contaminants above the Florida Department of Environmental Protection (FDEP) soil cleanup target levels (SCTLs). Sampling has not been conducted in the immediate vicinity of the railroad tracks. Some soil from the area in which unauthorized burning had occurred contained PAHs above the FDEP's industrial SCTLs. Approximately 72 cubic yards of soil were removed from this area in December 2001. Soils in the vicinity of the rail lines were not assessed because the past, current, and projected

future land use of the JJRY is continued use as a railroad yard. LUCs are therefore required to prohibit non-railroad yard use/exposure to the soils immediately adjacent to the railroad tracks.

## **DECISION DOCUMENT**

A Statement of Basis (SB) establishes institutional controls as a component of the remedy for this site. The SB for the site, KSC document number KSC-TA-5750, is available for review by contacting the KSC Environmental Program Office at telephone number (321) 867-8411.

## **IMPLEMENTATION**

Institutional controls will be implemented by the KSC Environmental Program Office in accordance with their RCRA permit and Land Use Control Assurance Plan included in a Memorandum of Agreement (MOA)<sup>2</sup> between NASA, FDEP, and the Environmental Protection Agency (EPA), effective February 23, 2001. Upon approval of this LUCIP, it will be incorporated into the permit by reference. Property transfer (if conducted in the future) will be conducted in accordance with Section X of the MOA.

KSC's Environmental Program Office will provide KSC's Master Planning Office with

*2. By separate MOA effective February 23, 2001, with the EPA and FDEP, KSC, on behalf of NASA, agreed to implement Center-wide, certain periodic site inspection, condition certification and agency notification procedures designed to ensure the maintenance by Center personnel of any site-specific LUCs deemed necessary for future protection of human health and the environment. A fundamental premise underlying execution of that agreement was that through the Center's substantial good faith compliance with the procedures called for herein, reasonable assurances would be provided to EPA and FDEP as to the permanency of those remedies which included the use of specific LUCs.*

*Although the terms and conditions of the MOA are not specifically incorporated or made enforceable herein by reference, it is understood and agreed by NASA KSC, EPA and FDEP that the contemplated permanence of the remedy reflected herein shall be dependent upon the Center's substantial good faith compliance with the specific LUC maintenance commitments reflected herein. Should such compliance not occur or should the MOA be terminated, it is understood that the protectiveness of the remedy concurred in may be reconsidered and that additional measures may need to be taken to adequately ensure necessary future protection of human health and the environment.*

survey coordinates of the LUCs. Restrictions will specify limitations on development and reuse for the area for as long as LUCs are necessary to protect human health and the environment.

### **MONITORING**

Quarterly inspections to monitor that institutional controls specified herein are in place and operating will be conducted by KSC's Environmental Program Office. The inspection will verify that the site is being operated exclusively as an industrial railroad facility and that no unauthorized use of the site is taking place that may result in adverse environmental impacts.

### **REPORTING**

KSC's Environmental Program Office will submit annual reports to EPA and FDEP certifying retention of the implemented LUCs.

### **ENFORCEMENT**

KSC's Environmental Program Office will be responsible for stopping any activities at KSC that are not compliant with this LUCIP.

### **MAINTENANCE**

This LUCIP will remain in place until a land use change is implemented and the concerns managed by the LUCIP are mitigated; or there is a discovery, based upon analytical evidence, that scenarios managed by the LUCIP are no longer a concern. Any change in LUC management must be approved by EPA and FDEP and implemented by modification of NASA's operating permit.

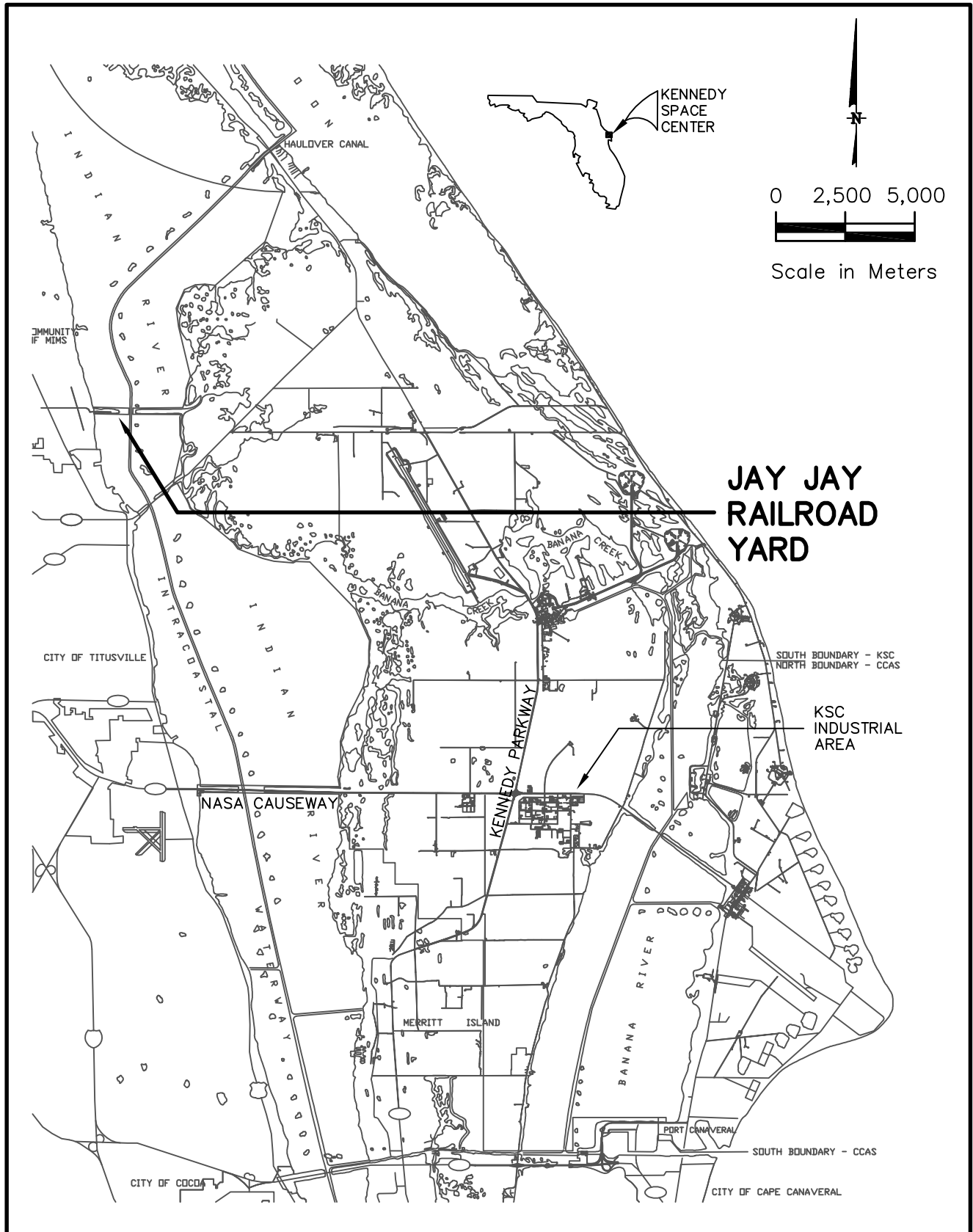
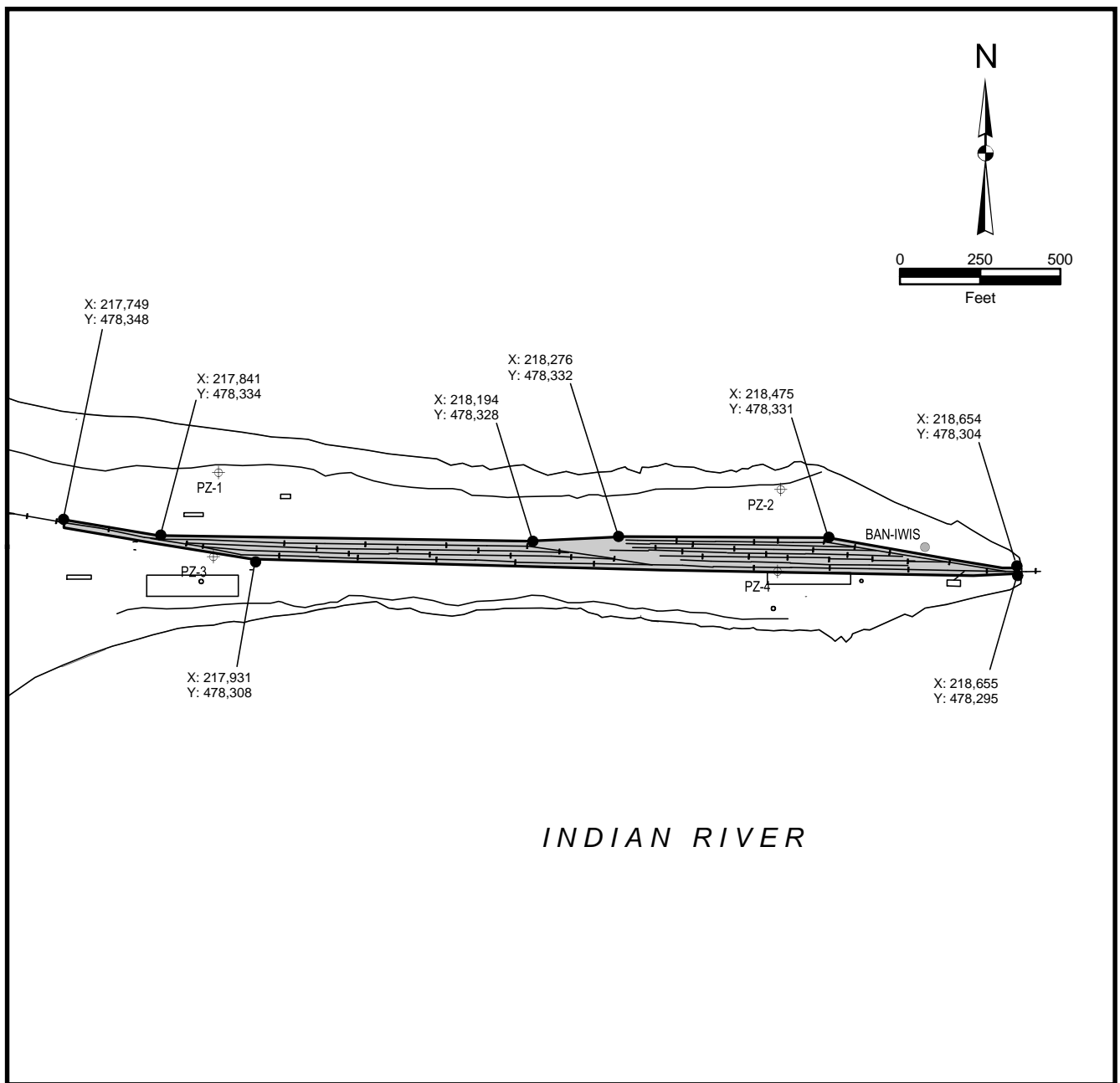


FIGURE 1

# **KENNEDY SPACE CENTER JAY JAY RAILROAD YARD SITE LOCATION MAP**



#### LEGEND

- Monitoring Well Location
- ⊕ Piezometer Location
- Basemap
- ▬ Boundary of Soil Use Control

#### Notes:

1. Soil use control area is identified as the shaded area.
2. Land Use Control for the site soils will be limited to property in the immediate vicinity of the rail lines including all rock aggregate and soil material used for construction of the railroad subbase (10 feet on either side of the tracks).